a reflective element directly below the shielding layer, wherein the shielding layer is thinner than the reflective element.

2. The image sensor device as claimed in claim **1**, wherein a bottom of the shielding layer is substantially coplanar with a bottom of the filter.

3. The image sensor device as claimed in claim **1**, wherein the shielding layer comprises a metal material.

4. The image sensor device as claimed in claim **1**, further comprising a lens over the photodetector.

5. The image sensor device as claimed in claim **1**, further comprising an anti-reflection layer between the semiconductor substrate and the shielding layer.

6. The image sensor device as claimed in claim **1**, further comprising:

a second dielectric layer surrounding the reflective element, wherein the second dielectric layer is between the semiconductor substrate and the dielectric layer.

7. The image sensor device as claimed in claim **6**, wherein materials of the reflective element and the shielding layer are the same.

8. The image sensor device as claimed in claim **6**, further comprising:

a black level correction region in the semiconductor substrate; and

a shielding element over the black level correction region, wherein materials of the shielding element and the reflective element are the same.

9. An image sensor device, comprising:

a semiconductor substrate having a first pixel region and a second pixel region;

a first photodetector and a second photodetector in the first pixel region and the second pixel region, respectively;

a dielectric layer over the semiconductor substrate, wherein the dielectric layer has a first recess and a second recess aligned with the first photodetector and the second photodetector, respectively;

a first filter and a second filter in the first recess and the second recess, respectively, wherein the first filter has a protruding portion protruding from a bottom surface of the dielectric layer;

a shielding layer between the dielectric layer and the semiconductor substrate and surrounding the first filter and the second filter, wherein the first filter and the shielding layer overlap from a view facing a direction perpendicular to a normal direction of a top surface of the semiconductor substrate, and the shielding layer surrounds the protruding portion of the first filter; and

a reflective element directly below the shielding layer, wherein the shielding layer is thinner than the reflective element.

10. The image sensor device as claimed in claim **9**, wherein the second filter has a second protruding portion protruding from a bottom surface of the dielectric layer, and the shielding layer surrounds the second protruding portion of the second filter.

11. The image sensor device as claimed in claim **9**, wherein a bottom of the shielding layer is substantially coplanar with bottoms of the first filter and the second filter.

12. The image sensor device as claimed in claim **9**, wherein the shielding layer comprises a metal material, a polymer material, a semiconductor material, a ceramic material, or a combination thereof.

13. The image sensor device as claimed in claim **9**, wherein a thickness of the shielding layer is in a range from about 10 nm to about 500 nm.

14. An image sensor device, comprising:

a semiconductor substrate;

a photodetector in the semiconductor substrate;

a filter over the semiconductor substrate and aligned with the photodetector;

a dielectric layer over the semiconductor substrate and surrounding the filter;

a shielding layer over the semiconductor substrate and surrounding a lower portion of the filter, wherein the lower portion of the filter protrudes from a bottom surface of the dielectric layer, and the shielding layer and the lower portion of the filter overlap from a view facing a direction perpendicular to a normal direction of a top surface of the semiconductor substrate; and

a reflective element directly below the shielding layer, wherein the shielding layer is thinner than the reflective element.

15. The image sensor device as claimed in claim **14**, wherein bottoms of the shielding layer and the filter are substantially coplanar with each other.

16. The image sensor device as claimed in claim **14**, wherein the shielding layer comprises a metal material.

17. The image sensor device as claimed in claim **14**, further comprising:

a second dielectric layer surrounding the reflective element, wherein the second dielectric layer is between the semiconductor substrate and the filter.

18. The image sensor device as claimed in claim **17**, wherein materials of the shielding layer and the reflective element are substantially the same.

19. The image device as claimed in claim **1**, wherein the reflective element is separated from the shielding layer.

20. The image device as claimed in claim **1**, wherein the shielding layer is wider than the reflective element.

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